

Title (en)

Manually shifted transmission with enhanced automatic range shift

Title (de)

Handbetriebenes Wechselgetriebe mit verbessertem automatischen Gangwechsel

Title (fr)

Boîte de changement de vitesses manuelle avec changement de vitesse automatique améliorée

Publication

EP 0800023 A3 19980722 (EN)

Application

EP 97104994 A 19970325

Priority

US 62659196 A 19960402

Abstract (en)

[origin: EP0800023A2] A manually shifted, range-type compound transmission (110) is provided with enhanced automatic range shifting. A controller (222) receives input signals indicative of shift lever position in the shift pattern (low range/high range) and of vehicle speed (OS) and automatically commands range shifts as a function of both system parameters. <IMAGE>

IPC 1-7

F16H 61/16; **F16H 3/093**

IPC 8 full level

B60K 20/02 (2006.01); **F16H 3/095** (2006.01); **F16H 59/04** (2006.01); **F16H 59/44** (2006.01); **F16H 61/02** (2006.01); **F16H 61/16** (2006.01); **F16H 61/18** (2006.01); **F16H 61/28** (2006.01); **F16H 59/40** (2006.01); **F16H 63/44** (2006.01)

CPC (source: EP US)

F16H 3/095 (2013.01 - EP US); **F16H 61/0248** (2013.01 - EP US); **F16H 61/16** (2013.01 - EP US); **F16H 59/40** (2013.01 - EP US); **F16H 59/44** (2013.01 - EP US); **F16H 63/44** (2013.01 - EP US); **F16H 2061/166** (2013.01 - EP US); **Y10T 74/1926** (2015.01 - EP US)

Citation (search report)

- [Y] US 4722249 A 19880202 - HARADA YOSHIHARU [JP], et al
- [YA] US 4679450 A 19870714 - HAYAKAWA YOICHI [JP], et al
- [Y] FR 2532711 A1 19840309 - PANHARD LEVASSOR SA CONST MECA [FR]
- [YA] DE 2752568 A1 19790607 - DAIMLER BENZ AG
- [Y] US 4945482 A 19900731 - NISHIKAWA SEIICHI [JP], et al
- [Y] EP 0350476 A2 19900110 - STEYR DAIMLER PUCH AG [AT]
- [Y] DE 2502445 A1 19750807 - STEYR DAIMLER PUCH AG
- [A] US 4721018 A 19880126 - HARADA YOSHIHARU [JP], et al
- [A] US 5416698 A 19950516 - HUTCHISON RONALD A [US]
- [A] US 5263379 A 19931123 - NEWBIGGING IAN M [GB], et al

Cited by

EP0947740A3; WO0075531A1; WO0214712A1

Designated contracting state (EPC)

DE ES FR GB IT NL SE

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EP 0800023 A2 19971008; **EP 0800023 A3 19980722**; **EP 0800023 B1 20030618**; BR 9700486 A 19981103; CN 1173436 A 19980218; CN 1173844 C 20041103; DE 69722843 D1 20030724; DE 69722843 T2 20040519; ES 2201217 T3 20040316; JP H1026221 A 19980127; US 5673592 A 19971007; US 6220108 B1 20010424

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EP 97104994 A 19970325; BR 9700486 A 19970402; CN 97110223 A 19970402; DE 69722843 T 19970325; ES 97104994 T 19970325; JP 8359797 A 19970402; US 62659196 A 19960402; US 89043897 A 19970709